REMARKS

Claims 12-20, 22 and 23 are pending in the present application. Claim 12 is herein amended. No new matter is believed to have been entered through the various claim amendments. Further, upon belief, it is respectfully submitted that this paper is fully responsive to the outstanding Office Action.

Claim Rejection - 35 U.S.C. §103

Claims 12-20, 22 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (WO 01/98067) in view of Yamashita et al. (US 5,100,604).

The rejection is respectfully traversed.

Claim 12 is herein amended. It is respectfully submitted that the cited art fails to teach or suggest, either alone or in combination, at least the recitations of claim 12 of, "a method for manufacturing a molding which comprises a core and an outer layer and has an enhanced strength in a portion of the outer layer forming the sidewall by using compression molding apparatus having an upper punch and a lower punch which are arranged in the vertical direction of a die, both of the upper punch and the lower punch having a double structure comprising a center punch and an outer punch surrounding the outer periphery of the center punch, and being slidable and capable of a compressing operation; the method comprising: a core supply step of supplying molding material for the core into a space defined above the lower center punch and

surrounded by the lower outer punch; a core molding step of compression-molding the molding material for the core supplied in the preceding step; an outer layer supply step of supplying molding material for the outer layer into a space defined above and around the core molding in the die molded in the preceding step until a tip of the lower center punch finally takes a position protruding from a tip of the lower outer punch by lowering the lower outer punch to increase the amount of the molding material for the outer layer on the lower outer punch; and a whole molding step of compression-molding the core molding and the molding material for the outer layer with the tips of the lower outer punch and the lower center punch aligned with each other."

A lower punch in US '604 is a ring like ordinary punch, not a double-structured punch. The center part of the lower punch in US '604 is not a punch but a center of float core (center core) because it does not compress molding material (column 10, line 18 and thereafter in US '604). The center of float core is a different component from the punch upon function and terminology.

Generally speaking, a punch can compress molding material, however the center of float core does not have a function for compressing as shown in drawings. From the above, it is clear that the center of float core is not a punch. Since the center of float core is not a punch, molding material is not supplied on the center of float core as a matter of course. Due to the fact that molding material is not supplied on the center of float core, the manufactured molding is different from the molding manufactured by the present invention and is a ring like molding. In

US '604, if there would not be the center of float core, molding material would be supplied to the part corresponding to the center of float core, then, the ring like molding could not be made. Hence, the center of float core is provided to interrupt supply of molding material so as to fail to supply molding material to the corresponding part. US '604 only teaches to lower the ring like lower punch and to supply molding material on the ring like lower punch. The process that a lower punch is lowered and molding material is supplied on the lower punch is generally implemented all over the world. For the reasons stated above, the present invention is not obvious because the present invention is not formed by the combination of US '604 and WO '067.

Substantially speaking, since molding material is not supplied on the center of float core but is only supplied on the ring like lower punch in US '604, an idea of enhancing the density of the molding material on the ring like lower punch can not arise. On the other side, in the case of the present invention, since molding material is (was) supplied on the lower center punch (a part constituting the center part of the molding), an idea of enhancing the density of the molding material on the lower outer punch arose, due to the fact that the density of the molding material on the lower outer punch is lower than that on the lower center punch.

It is stated formerly that it is difficult to recognize the cause of the problem in WO '067. The problem in WO '067 and the principle of the present invention are described in paragraph No. 0008 in the specification. Applicants explain this again. In fig. 1 of WO '067, the thickness

of the outer layer molding material supplied into the space on the lower outer punch and around the outer layer/core temporary molding (outer layer molding material of the side part) is equal to that of the outer layer/core temporary molding (temporary molding on the center punch). If each thickness of unmolded molding material and molded molding material is the same, the filling density of the molded molding material is higher than that of unmolded molding material. Then, the inventors became aware that the filling density of the outer layer molding material supplied into the space on the lower outer punch and around the outer layer/core temporary molding (outer layer molding material of the side part) becomes lower than that of the molding material of the outer layer/core temporary molding (temporary molding on the center punch), and that is the cause of the lack of side intensity of the molding.

As a solution, by "supplying the outer layer molding material until the tip of the lower center punch takes a position protruding from the tip of the lower outer punch by lowering the lower outer punch", filling amount of the outer layer molding material that become the side part of the outer layer of the molding is increased, then, the whole molding material is compression-molded with the tip of the lower outer punch and the lower center punch aligned with each other, thereby it is reached that the filing density of the outer layer molding material of the side part of the finished product becomes higher.

Furthermore, the amended claims are explained.

Claim 12 is amended mainly using terms in the specification, according to the suggestion of the Examiner. No new matter is added. Additionally, claim 12 includes all embodiments illustrated in Figs. 1-3. First outer layer supply step and molding step (B-E of Fig. 1) are not necessary steps and are not involved as compositions of the claimed invention. The difference from WO '067 is illustrated in processes J, K and L in Fig.1.

Claim 13 corresponds to the embodiment illustrated in Fig. 1, in which the first outer layer supply step (B of Fig. 1) is performed prior to the core supply step. The difference from WO '067 is illustrated in processes J, K and L in Fig. 1.

Claim 14 corresponds to the embodiment illustrated in Fig. 2 or Fig. 3, in which it is clarified that the first outer layer supply step is not performed prior to the core supply step. The difference from WO '067 is illustrated in processes F-H in Fig. 2 or in processes F-I in Fig. 3, and is in that processes B-E in Fig. 1 of US '067 is omitted. In the invention of claim 14, the outer layer molding material is supplied until the tip of the lower center punch takes a position protruding from the tip of the lower outer punch by lowering the lower outer punch, then the whole molding material is compression-molded with the tip of the lower outer punch and the lower center punch aligned with each other, thereby the outer layer molding material on the lower outer punch is introduced under the core molding. Therefore, the invention of claim 14 is made by finding out that a molding with core can be manufactured even if the first outer layer supply

step prior to the core supply step which is necessary in Fig. 1 of WO '067 is omitted in the present invention. So, the invention of claim 14 is an epoch-making invention.

Cairns 15-22 are dependent claims relating to methods or processes of aligning the tip of the lower center punch and that of the lower outer punch and so on.

Claim 23 is a dependent claim depending on claim 13, and corresponds to the embodiment illustrated in Fig. 1, in which it is specified that an outer layer molding step of compression-molding the molding material for the outer layer prior to the core supply step is performed, which is not a necessary step of claim 13.

In view of the foregoing, it is respectfully submitted that the rejection is overcome.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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